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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,314	04/18/2006	Erwin Rinaldo Meinders	FR 030126	4451
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EXAMINER				
FANG, PAKEE				
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4146				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,314

Applicant(s)

MEINDERS ET AL.

Examiner

PAKEE FANG

Art Unit

4146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 - 12 are presented for examination.

The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the application filed on 04/18/2006.

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a

basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) If a machine or apparatus, its organization and operation;
- (2) If an article, its method of making;
- (3) If a chemical compound, its identity and use;
- (4) If a mixture, its ingredients;
- (5) If a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. The abstract of the disclosure is objected to because of the improper introduction of labels for the drawing and includes two pages. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 - 5 & 7 - 12 are rejected under 35 U.S.C. 102(e) as being unpatentable over Kimura et al. (US. Pat. 7116309 B1).

Claim 1.

In regard to claim 1, *A display for displaying pre-recorded images*, See at least (Kimura; Fig. 1, 17 & 21) - for a display for displaying pre-recorded images.

said display comprising at least one image stack comprising at least one image sub-stack (13, 14, 15), See at least (Kimura; Fig. 3 - 6; Col. 6 line 8 - 35) – for an image stack comprising at least one image sub-stack.

said image sub-stack comprising a material which optical properties depend on a potential difference (V1) applied between two electrodes (13, 15), See at least (Kimura; Fig. 3; Col. 2 line 6- 36 & Col. 6 line 8 - 35) – for a sub-stack comprising a material which optical

properties “the lower electrode 13 is transparent with respect to writing light 11 and the upper electrode 13 is transparent with respect to emitted light.” depend on potential difference applied between the electrodes. Also, see “when voltage is applied to a space between the pair of the electrodes and writing light is applied”

wherein said image sub-stack can be locally altered in order to record an image. See at least (Kimura; Fig. 5 & 6; Col. 6 line 8 - 35) – for an alternative order of the sub-stack to record image.

Claim 2.

In regard to claim 2, *A display for displaying pre-recorded images*, See at least (Kimura; Fig. 1, 17 & 21) - for a display for displaying pre-recorded images.

said display comprising at least one image stack comprising at least one image sub-stack, See at least (Kimura; Fig. 3 – 6; Col. 6 line 8 - 35) – for an image stack comprising at least one image sub-stack.

said image sub-stack comprising a material which optical properties depend on a potential difference applied between two electrodes, See at least (Kimura; Fig. 3; Col. 2 line 6 – 36 & Col. 6 line 8 - 35) – for a sub-stack comprising a material which optical properties “the lower electrode 13 is transparent with respect to writing light 11 and the upper electrode 13 is transparent with respect to emitted light.” depend on potential difference applied between the

electrodes. Also, see “when voltage is applied to a space between the pair of the electrodes and writing light is applied”

wherein said image sub-stack is locally altered in order to record an image; See at least (Kimura; Fig. 5 & 6; Col. 6 line 8 - 35) – for an alternative order of the sub-stack to record image.

which can be displayed by applying said potential difference between said two electrodes. See at least (Kimura; Fig. 3 - 6; Col. 2 line 5 - 35) – for applying a voltage “...when voltage is applied to a space between the pair of the electrodes and writing light is applied...” to display images.

Claim 3.

In regard to claim 3, *wherein said material is an electrochromic material. See at least (Kimura; Fig. 3 - 6; Col. 2 line 5 - 35) – for “...electrochromic layers are laminated or an electrochromic material...”*

Claim 4.

In regard to claim 4, *wherein said electrochromic material has an ability to take up or release electrons, which can be locally reduced by means of an optical beam. See at least (Kimura; Fig. 3 - 6; Col. 6 line 5 - 35) – for “supply or receipt of electrons is performed in only the region of the EC layer 17 corresponding to the foregoing region of the photoconductor layer 15” which is proportionally affected by light.*

Claim 5.

In regard to claim 5, *said display further comprising a color filter*; See at least (Kimura; Fig. 17; Col. 17 line 5 - 25) – for “... a structure incorporating color filters.”

Claim 7.

In regard to claim 7, *wherein said at least one image stack comprises at least two image sub-stacks comprising materials having different optical properties*. See at least (Kimura; Fig. 3 – 6; Col. 6 line 8 - 35) – for an image stack comprising at least two image sub-stacks comprising materials having different optical properties. “...the photoconductor layer 15 may be structured by laminating a CGM (Carrier Generation Material) layer for generating the carriers and an ETM (Electron Transfer Material) layer for moving the generated carriers...”

Claim 8.

In regard to claim 8, *said display comprising at least two image stacks (61, 63)*. See at least (Kimura; Fig. 3 – 6; Col. 6 line 8 - 35) – for an image stack comprising at least two image sub-stacks.

Claim 9.

In regard to claim 9, *a method for recording an image in a display as claimed in claim 1, said method comprising a step of locally altering said at least one image sub-stack in order to*

record an image. See at least (Kimura; Fig. 5 & 6; Col. 6 line 35 - 62) – for a method of an alternative order of the sub-stack to record image.

Claim 10.

In regard to claim 10, *wherein said altering step comprises a sub-step of focusing an optical beam on the at least one image sub-stack;* See at least (Kimura; Fig. 5 & 6; Col. 6 line 35 - 62) – for an alternative order of the sub-stack, where one of the sub-step involves focusing an optical beam on one of the layers, electrode 13. "... electrode 13 is transparent with respect to emitted light..." (Col. 6 line 5 -15)

Claim 11.

In regard to claim 11, *said cartridge comprising means for receiving said display,* See at least (Kimura; Fig. 1, 17 & 21) – for a cartridge has a screen receiving mean of a display.

means for receiving a signal comprising information about a selected image sub-stack
See at least (Kimura; Fig. 1; Col. 6 line 16- 20 & Col. 14 Line 21 - 48) – for a movement signal of light which selects the sub-stack of photoconductor layer. "The photoconductor layer 15 is a layer for generating and conducting electrons and holes such that carriers in only a region irradiated with writing light 11 are moved." Also see, "the image displayed on the writing display plate 3 is read by moving the light receiving portions. Then, image information can be converted into an analog signal or digital signal which is transmitted to the outside portion of the apparatus."

and means for applying a potential difference between the two electrodes of said selected image sub-stack. See at least (Kimura; Fig. 3; Col. 2 line 6 – 36 & Col. 6 line 8 - 35) – for a voltage mean for applying a potential difference between the electrodes of the selected sub-stack comprising a material which optical properties “the lower electrode 13 is transparent with respect to writing light 11 and the upper electrode 13 is transparent with respect to emitted light.” depend on potential difference applied between the electrodes. Also, see “when voltage is applied to a space between the pair of the electrodes and writing light is applied”

Claim 12.

In regard to claim 12, *said cartridge comprising means for receiving said display*, See at least (Kimura; Fig. 1 & 21) – for a cartridge has a screen receiving mean of a display.

means for selecting an image sub-stack See at least (Kimura; Fig. 1; Col. 6 line 16- 20 & Col. 14 Line 21 - 48) – for a movement signal of light which selects the sub-stack of photoconductor layer. “The photoconductor layer 15 is a layer for generating and conducting electrons and holes such that carriers in only a region irradiated with writing light 11 are moved.”

and means for applying a potential difference between the two electrodes of the selected image sub-stack. See at least (Kimura; Fig. 3; Col. 2 line 6 – 36 & Col. 6 line 8 - 35) – for a voltage mean for applying a potential difference between the electrodes of the selected sub-stack

comprising a material which optical properties “the lower electrode 13 is transparent with respect to writing light 11 and the upper electrode 13 is transparent with respect to emitted light.” depend on potential difference applied between the electrodes. Also, see “when voltage is applied to a space between the pair of the electrodes and writing light is applied”

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura in view of Abileah (US Pat. 7053967 B2).

Claim 6.

In regard to claim 6, *said color filter comprising pixels having different colors*. See at least (Kimura; Fig. 17; Col. 1 line 55 – 67 & Col. 17 line 5 - 25) – Kimura discloses a color filter comprising for multiple colors. “...an EC device incorporating RGB (or YMC) color filters disposed on a plane has been known.” Also, see “... a structure incorporating color filters.” but, fails to disclose pixels having different colors. However, Abileah discloses “The pixel electrodes 230 are generally grouped into a "single" effective pixel so that a corresponding set of pixel electrodes 230 may be associated with respective color filters (e.g., red, green, blue).” (Col. 5 line 11 – 16) Since, Kimura and Abileah inventions are analogous art addressing a color filter with plurality of color in a display system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the color filter of Kimura with the multicolor pixel in a color filter of Abileah to make the color more authentic for the enhance of image quality, and to improve the user’s experience.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mason (US Pat. 5016991) - This invention is directed to a flexible, solid electrolyte useful in an electrochromic device.

Paukshot et al. (US Pat. 7190416 B2) - The invention pertains to data display systems, in particular, liquid crystal displays controlled by an operator touching a certain area of the display screen.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAKEE FANG whose telephone number is (571)270-7219. The examiner can normally be reached on Monday-Friday 9AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Ramesh can be reached on (571)272-3688. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAKEE FANG/
Examiner, Art Unit 4146

/Ramesh B. Patel/
Supervisory Patent Examiner, Art Unit 4146